Fig. 1

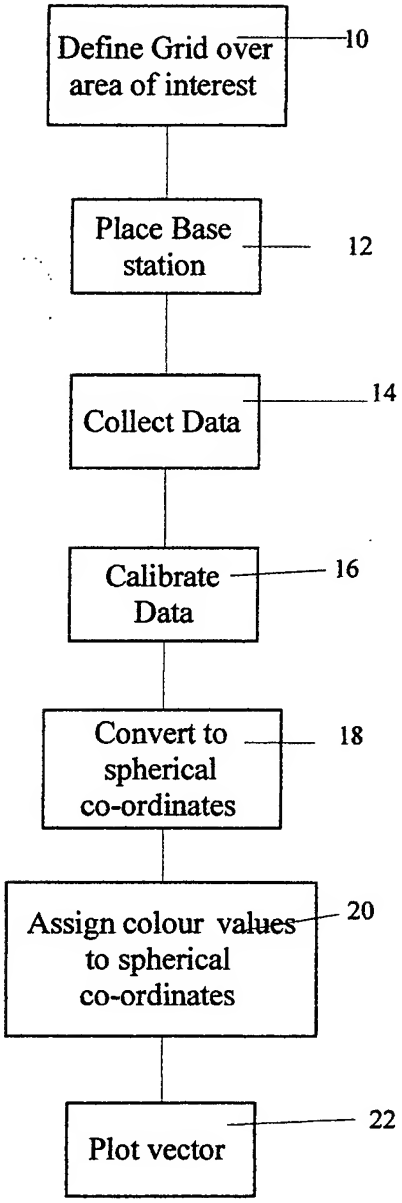
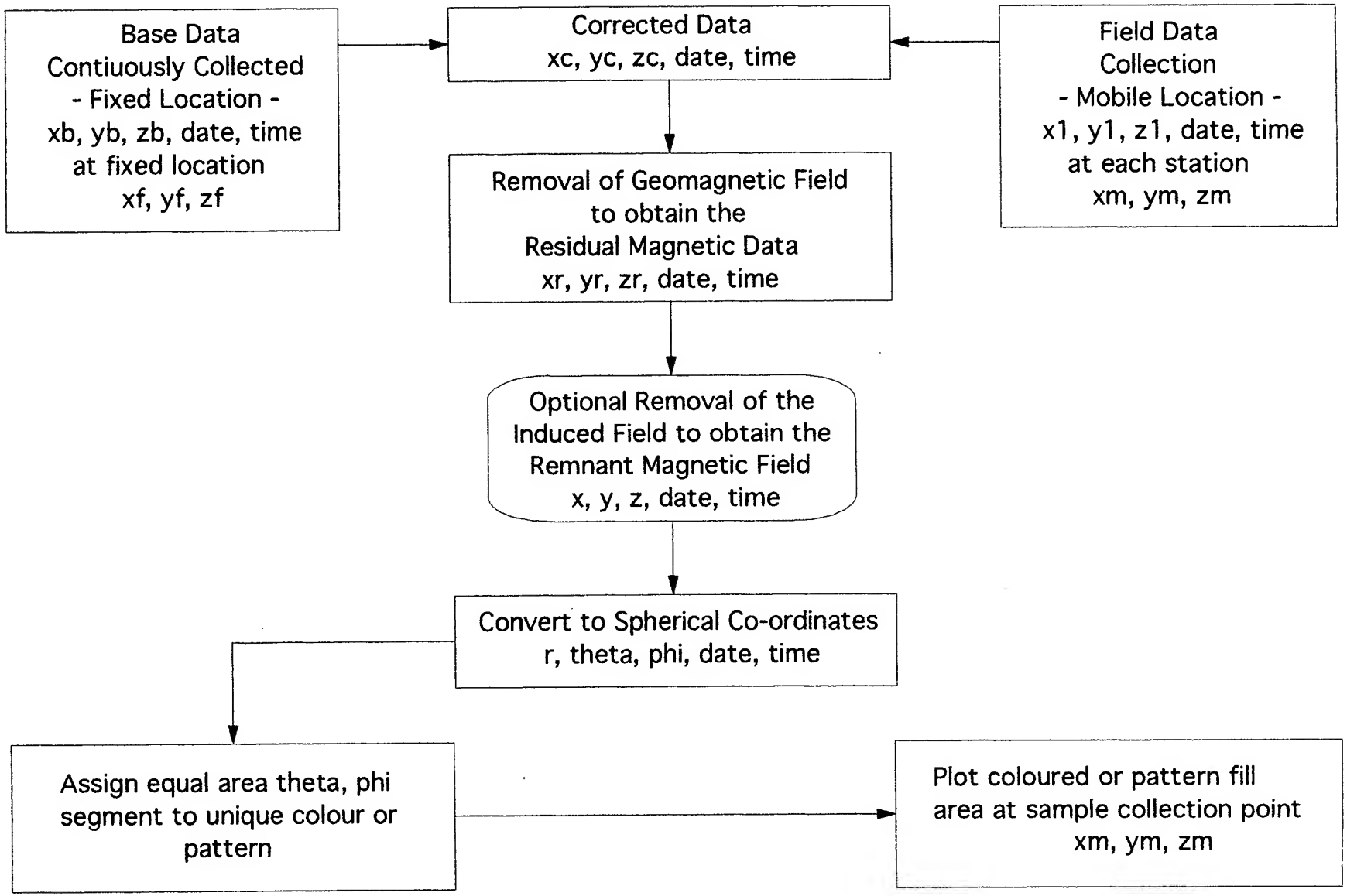

Define Grid over area of interest
10
Place Base station
12
Collect Data
14
Calibrate Data
16
Convert to spherical co-ordinates
18
Assign colour values to spherical co-ordinates
20
Plot vector
22

Fig. 1a


Base Data
Contiuously Collected
- Fixed Location -
xb, yb, zb, date, time
at fixed location
xf, yf, zf
Corrected Data
xc, yc, zc, date, time
Field Data
Collection
- Mobile Location -
x1, y1, z1, date, time
at each station
xm, ym, zm
Removal of Geomagnetic Field
to obtain the
Residual Magnetic Data
xr, yr, zr, date, time
Optional Removal of the
Induced Field to obtain the
Remnant Magnetic Field
x, y, z, date, time
Convert to Spherical Co-ordinates
r, theta, phi, date, time
Assign equal area theta, phi
segment to unique colour or
pattern
Plot coloured or pattern fill
area at sample collection point
xm, ym, zm

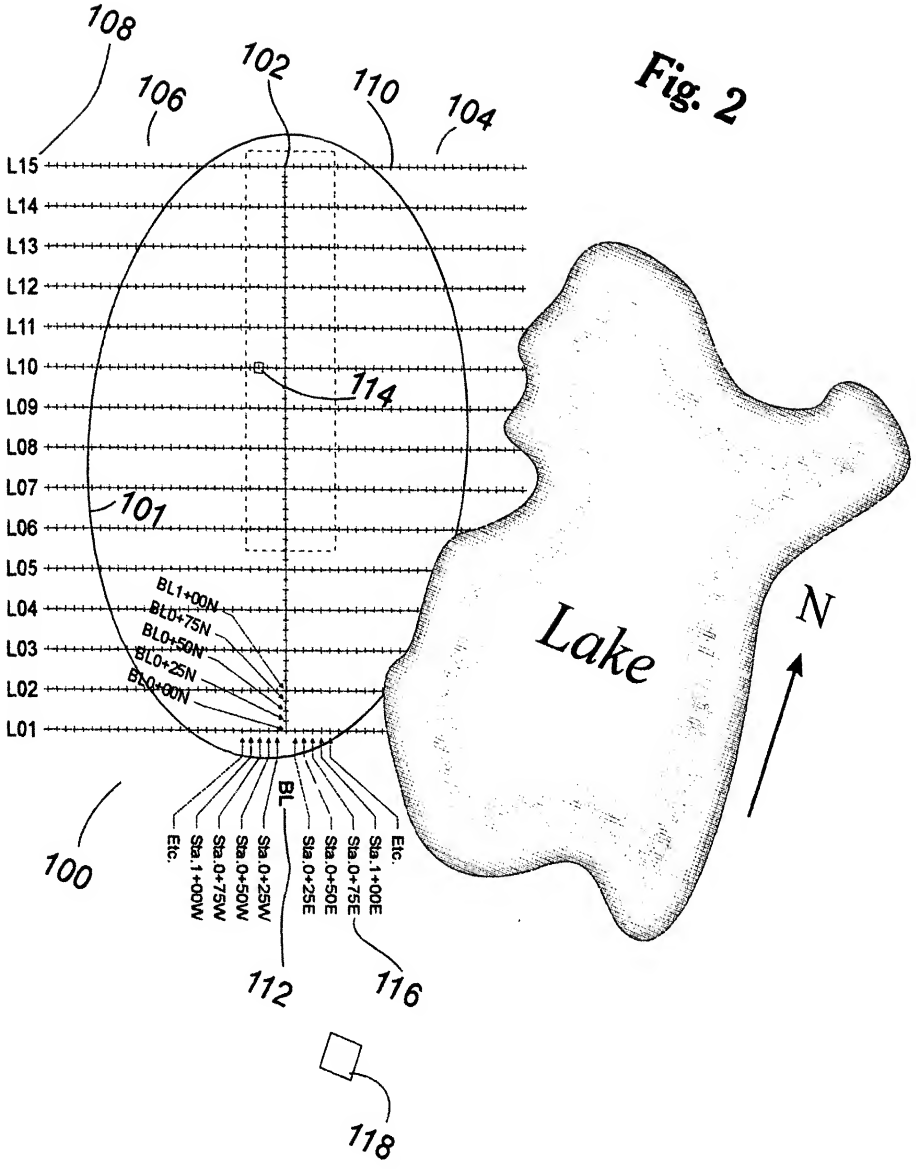

108
106
102
110
104
L15
L14
L13
L12
L11
L10
L09
L08
L07
L06
L05
L04
L03
L02
L01
114
101
BL1+00N
BL0+75N
BL0+50N
BL0+25N
BL0+00N
Lake
N
100
Etc.
Sta.1+00W
Sta.0+75W
Sta.0+50W
Sta.0+25W
BL
Sta.0+25E
Sta.0+50E
Sta.0+75E
Sta.1+00E
Etc.
112
116
118

Fig. 2

Fig. 3

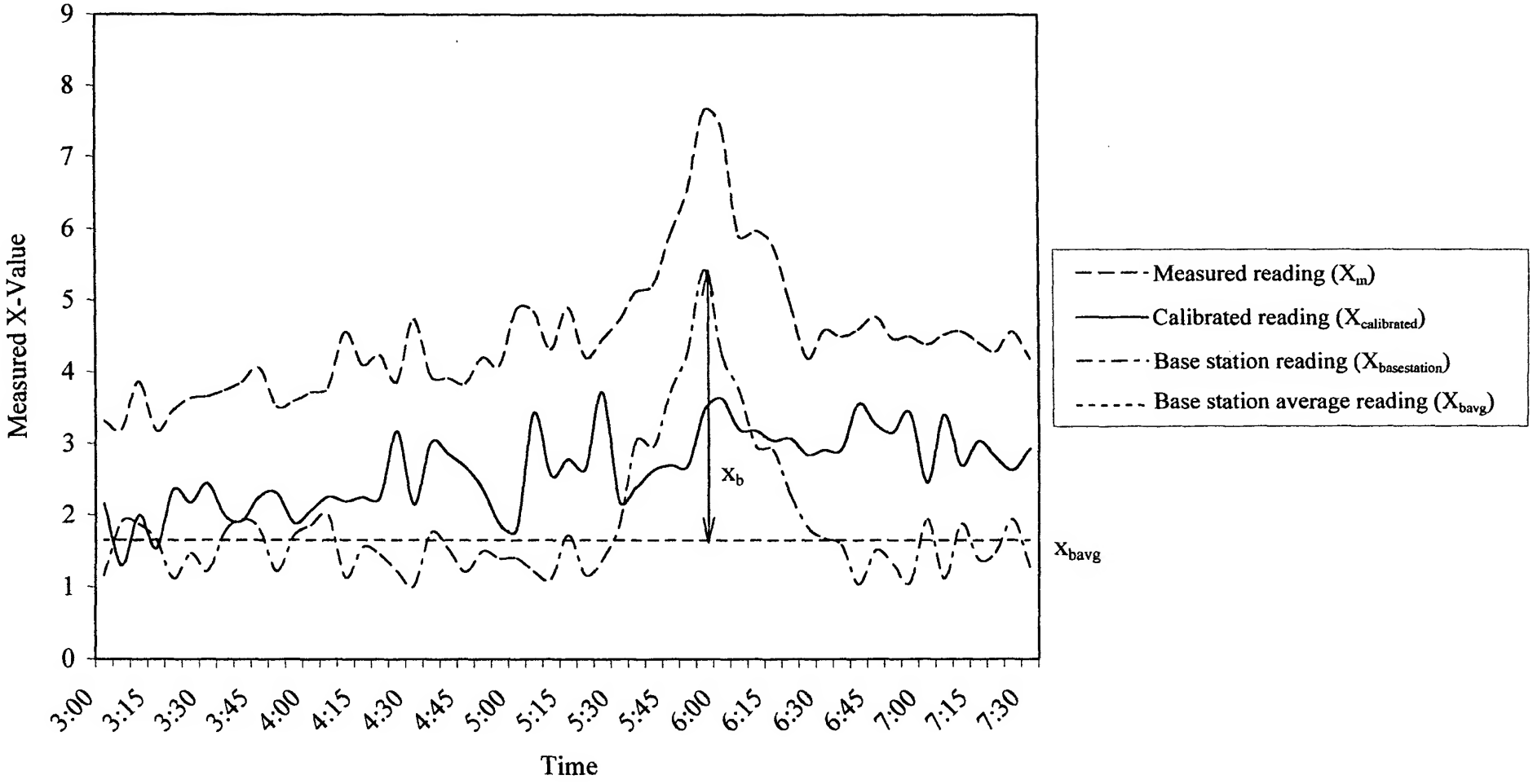

Measured X-Value
9
8
7
6
5
4
3
2
1
0
3:00
3:15
3:30
3:45
4:00
4:15
4:30
4:45
5:00
5:15
5:30
5:45
6:00
6:15
6:30
6:45
7:00
7:15
7:30
Time
X_b
X_{bavg}
Measured reading (X_m)
Calibrated reading ($X_{calibrated}$)
Base station reading ($X_{basestation}$)
Base station average reading (X_{bavg})

Fig. 4

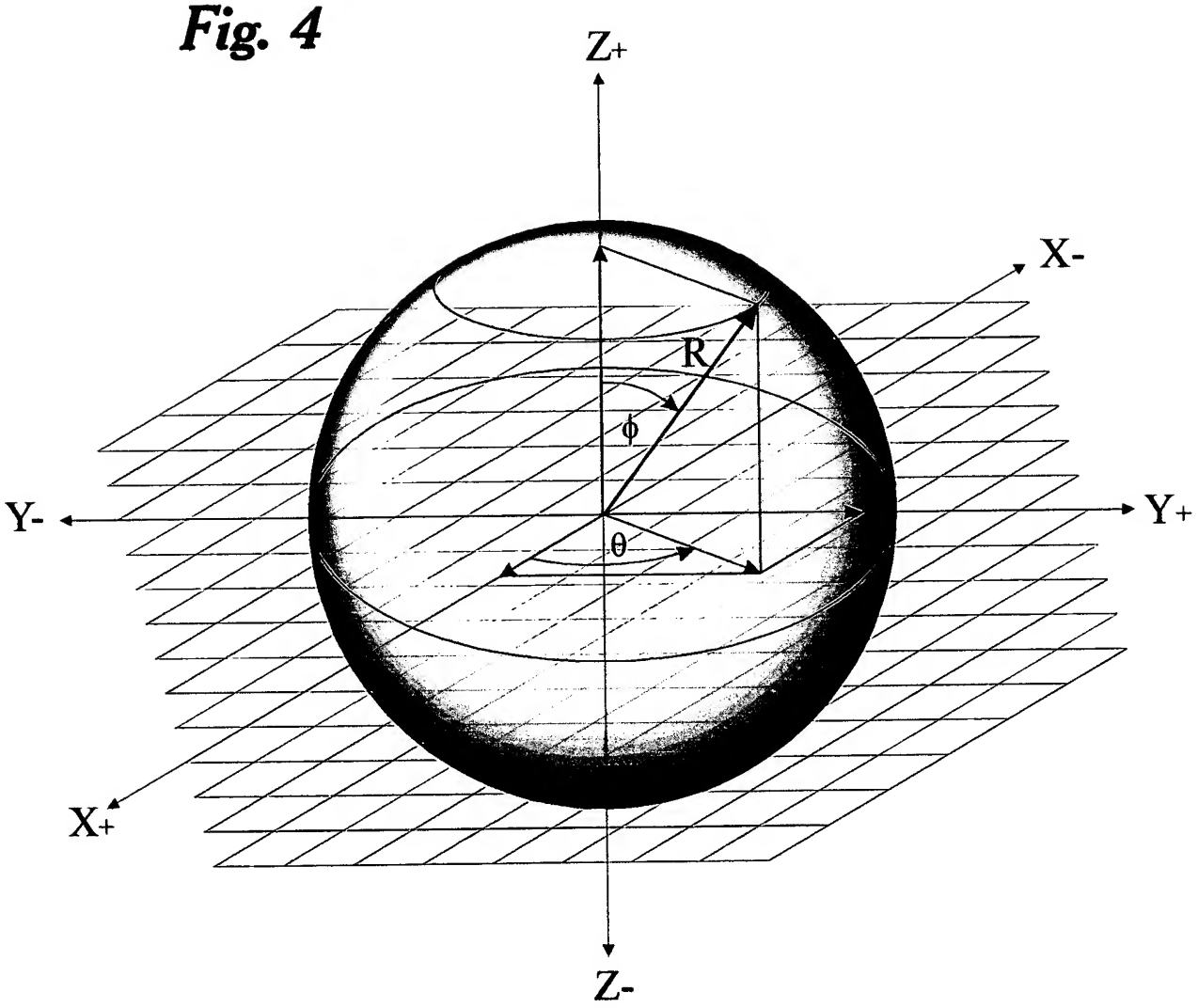


Fig. 4a

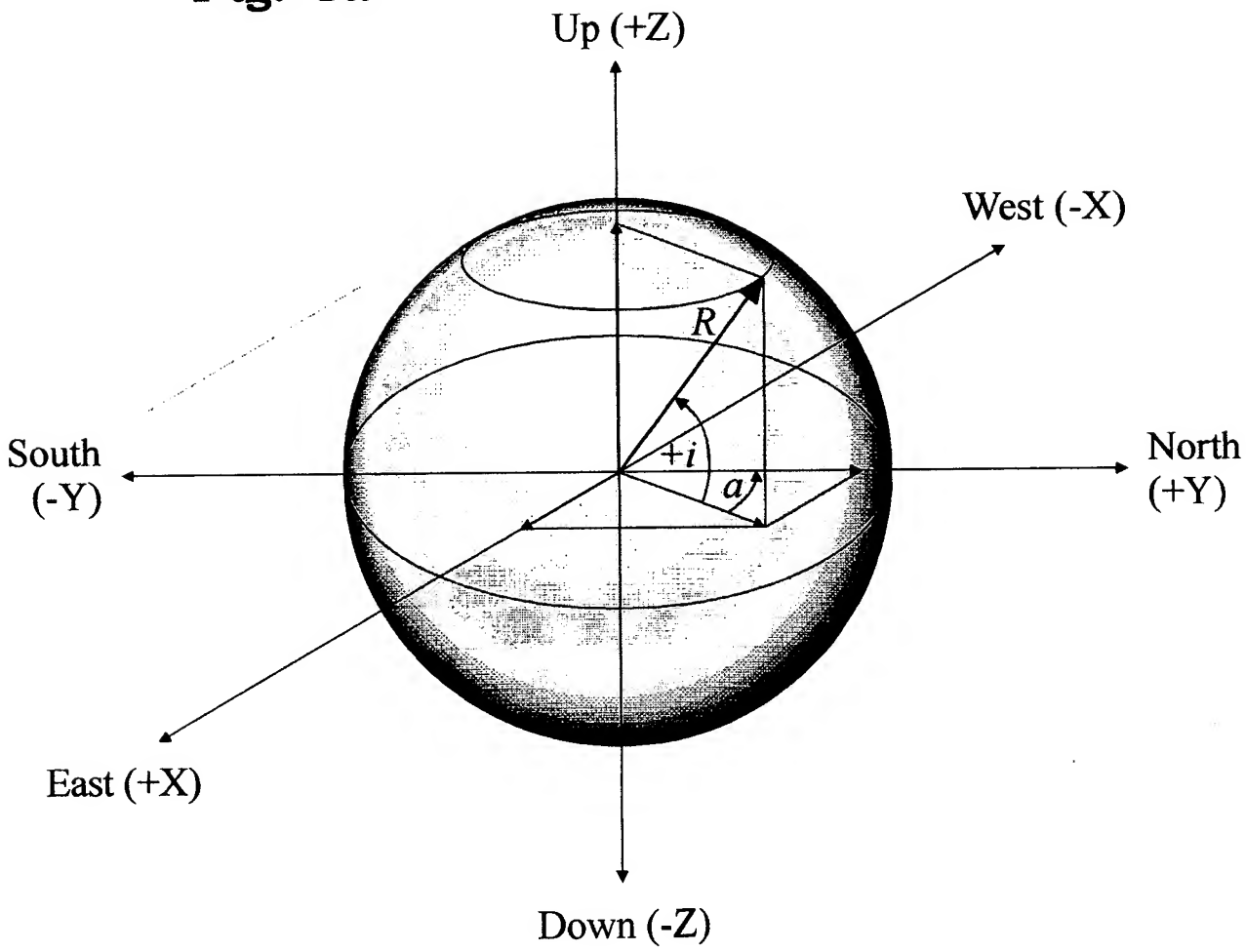


Fig. 5

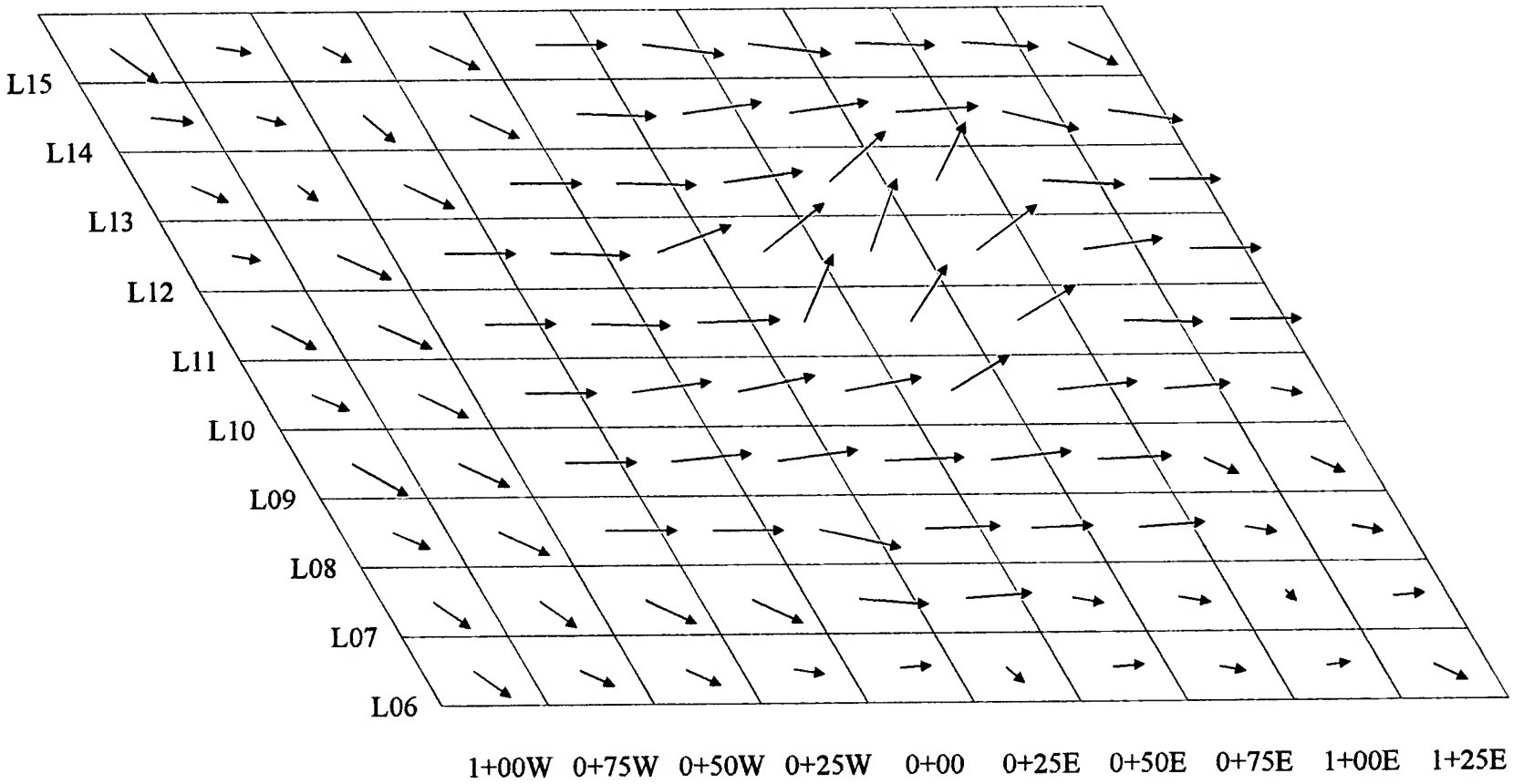

L15
L14
L13
L12
L11
L10
L09
L08
L07
L06
1+00W
0+75W
0+50W
0+25W
0+00
0+25E
0+50E
0+75E
1+00E
1+25E

Fig. 6

	1+00W		0+75W		0+50W		0+25W		0+00		0+25E		0+50E		0+75E		1+00E		1+25E	
	θ	ϕ	θ	ϕ	θ	ϕ	θ	ϕ	θ	ϕ	θ	ϕ	θ	ϕ	θ	ϕ	θ	ϕ	θ	ϕ
L15	276	72	276	66	276	66	276	60	276	54	264	66	276	54	270	60	270	54	276	66
L14	276	72	276	72	288	72	288	72	312	66	312	60	276	60	276	60	258	60	276	54
L13	276	66	288	72	318	66	318	66	330	84	324	66	306	60	312	60	276	60	276	60
L12	288	78	288	72	318	66	342	72	354	78	336	72	342	72	324	66	276	66	276	66
L11	276	66	288	72	318	66	354	78	360	77	6	84	24	78	342	72	312	60	276	60
L10	282	72	288	72	318	66	330	72	354	84	48	66	42	72	24	78	330	72	318	66
L09	270	60	288	72	318	66	330	72	354	66	12	60	47	60	18	66	354	78	318	66
L08	276	66	264	66	288	72	318	66	330	72	354	78	24	66	47	72	336	78	318	66
L07	282	60	270	60	270	72	288	72	330	72	354	78	354	78	348	78	318	78	318	72
L06	282	78	276	60	270	66	288	72	318	66	330	78	330	78	330	72	324	72	288	72

Fig. 7

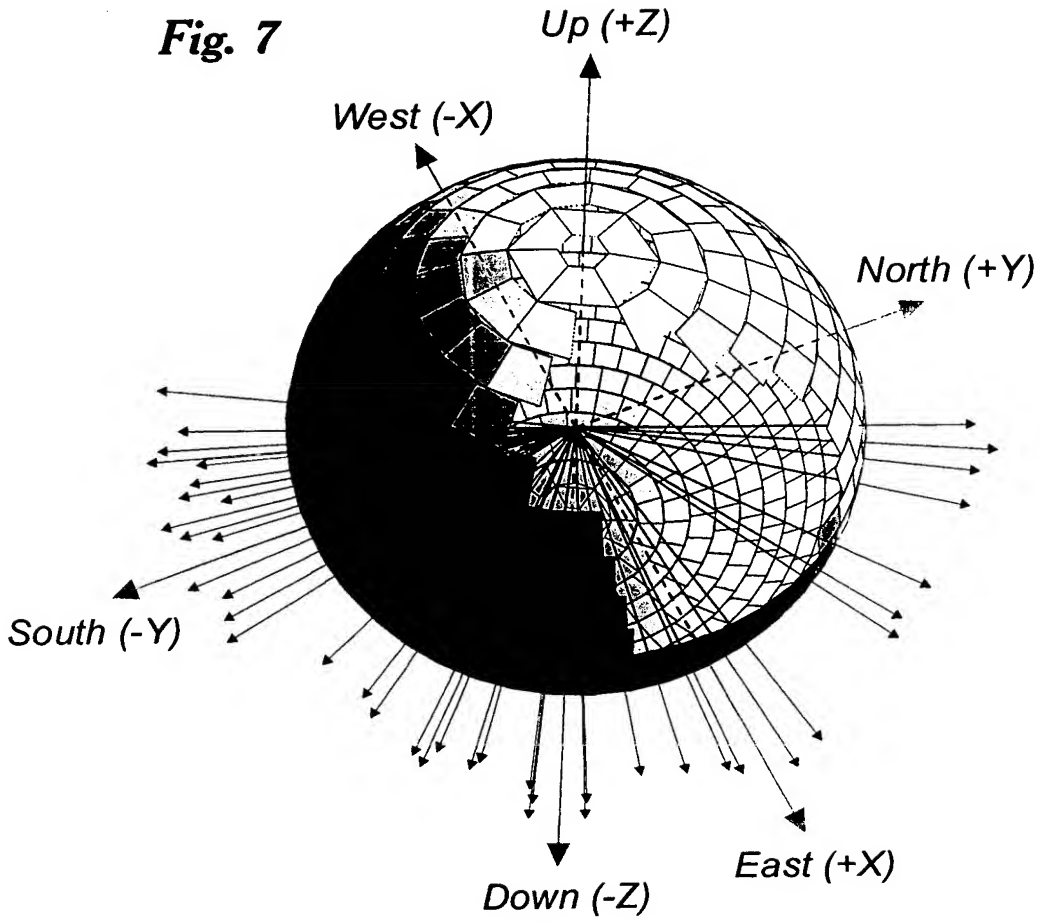


Fig. 8

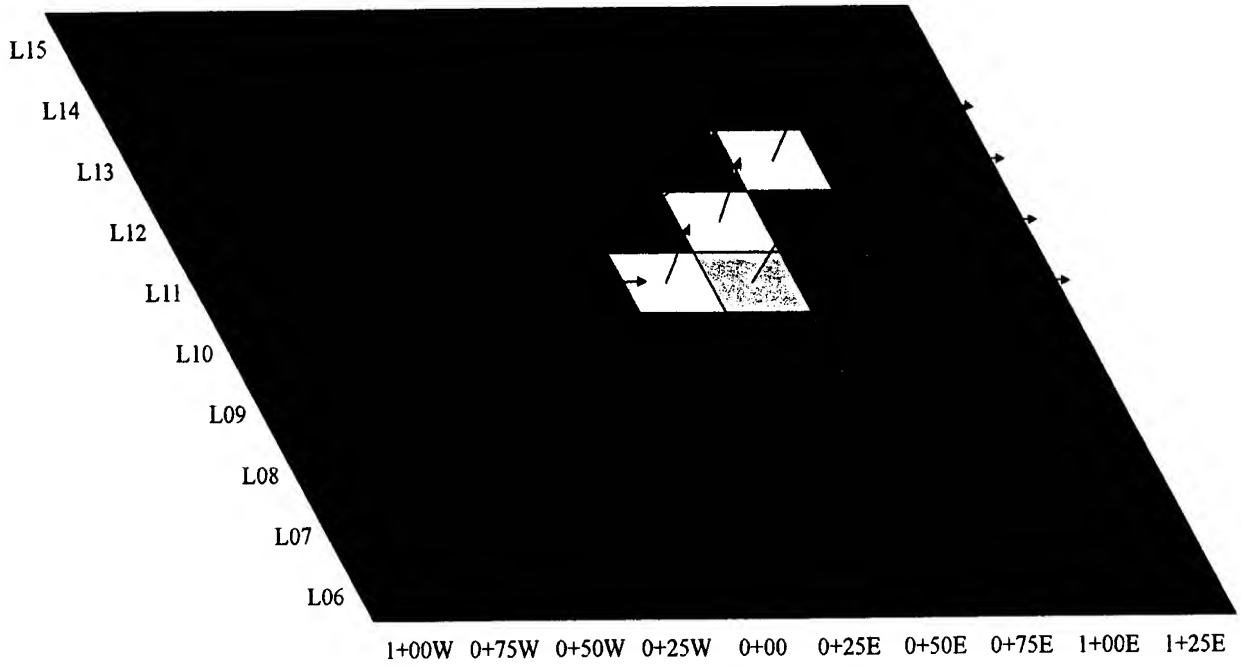

L15
L14
L13
L12
L11
L10
L09
L08
L07
L06
1+00W
0+75W
0+50W
0+25W
0+00
0+25E
0+50E
0+75E
1+00E
1+25E

Fig. 9

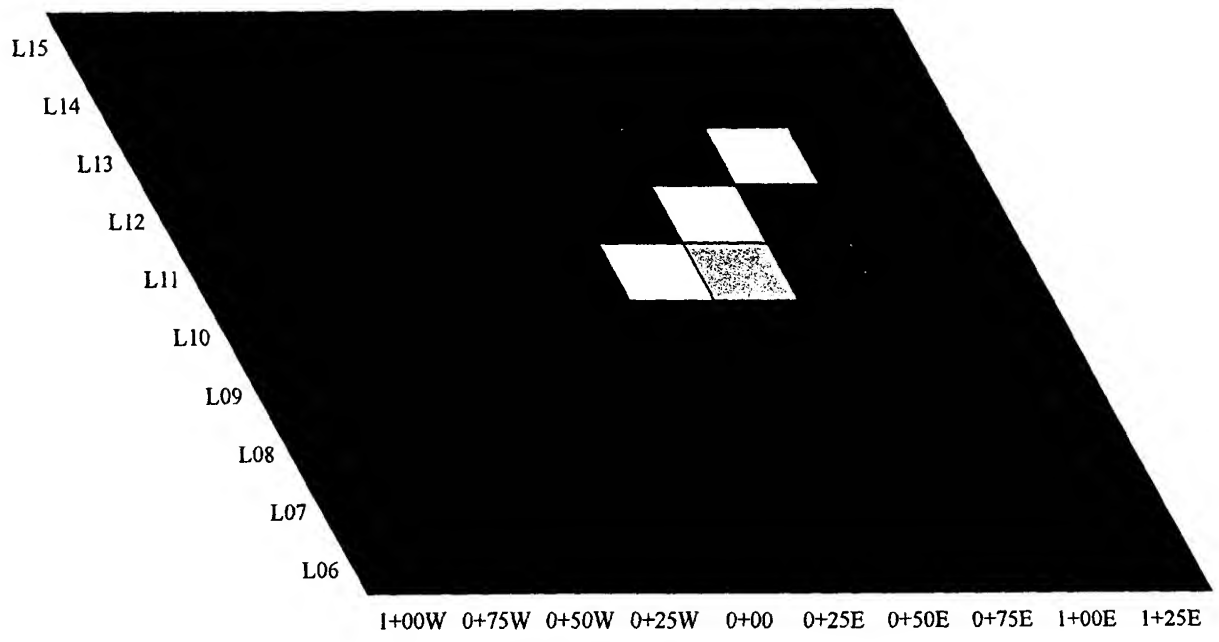

L15
L14
L13
L12
L11
L10
L09
L08
L07
L06
1+00W
0+75W
0+50W
0+25W
0+00
0+25E
0+50E
0+75E
1+00E
1+25E

Fig. 10

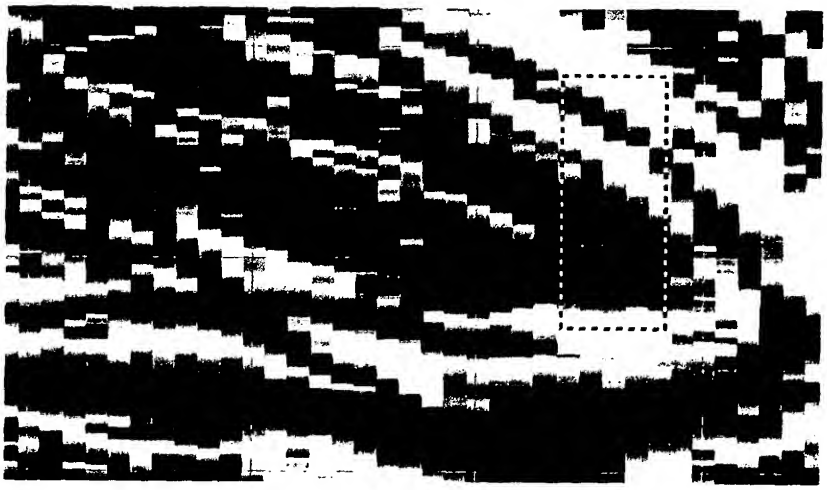
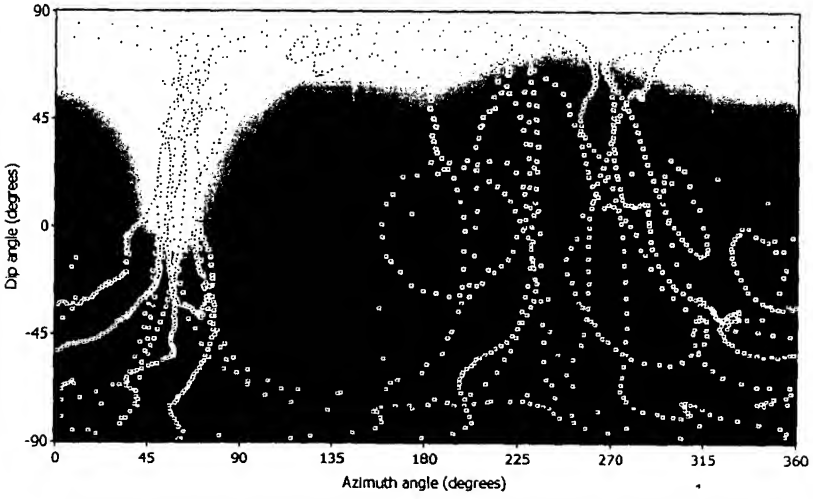


Fig. 10a



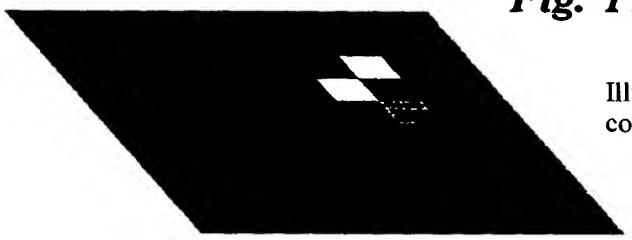


Fig. 11

Illustration of typical vector colour-coded orientation surface.

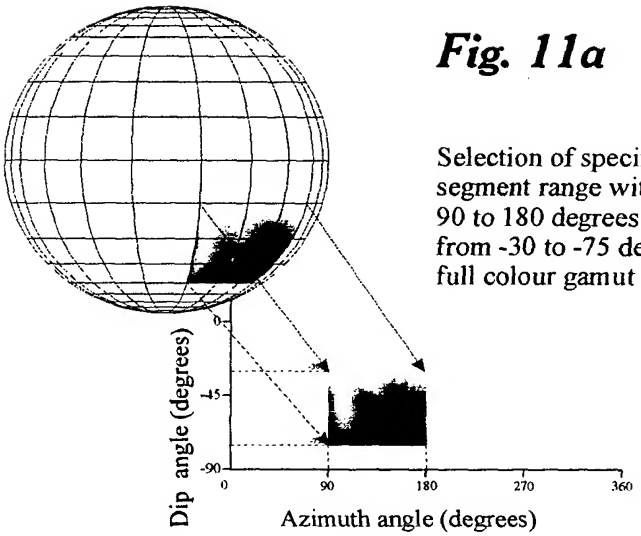


Fig. 11a

Selection of specific sector and segment range with azimuth from 90 to 180 degrees and inclination from -30 to -75 degrees, giving full colour gamut discrimination.

Fig. 11b

Illustration of coloured areas corresponding to selected sector. Showing enhanced discrimination of orientation.

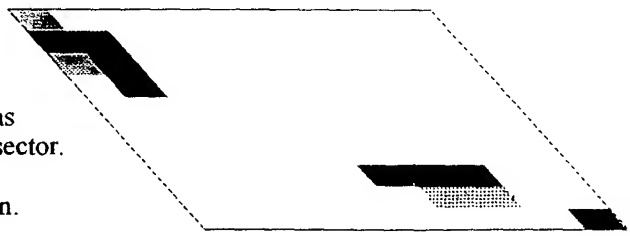


Fig. 12

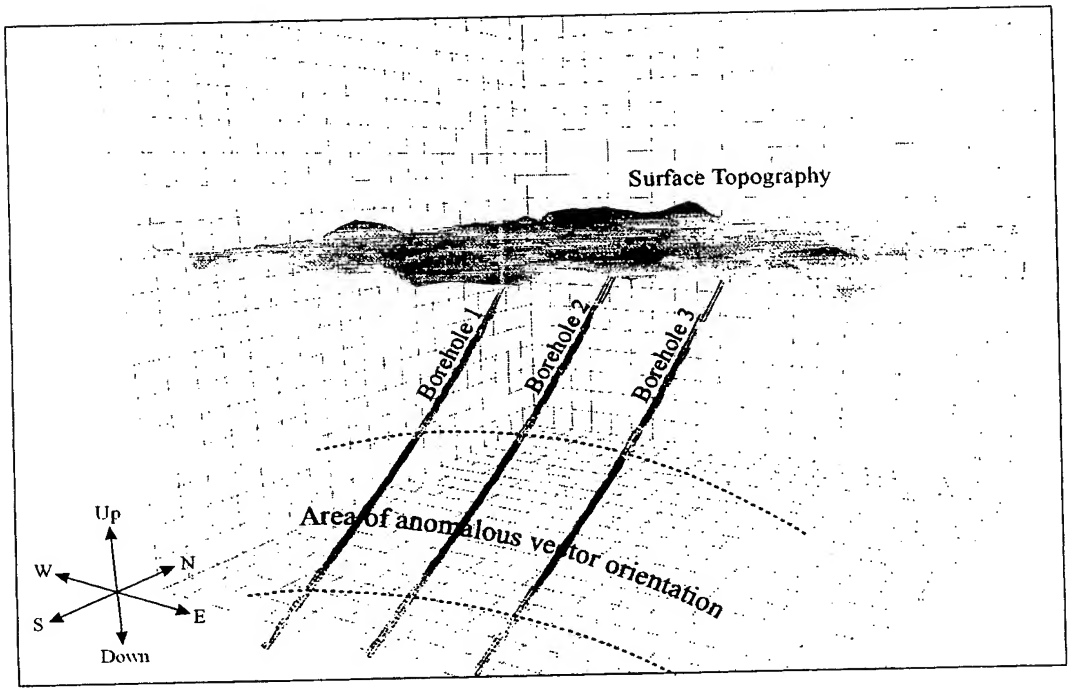
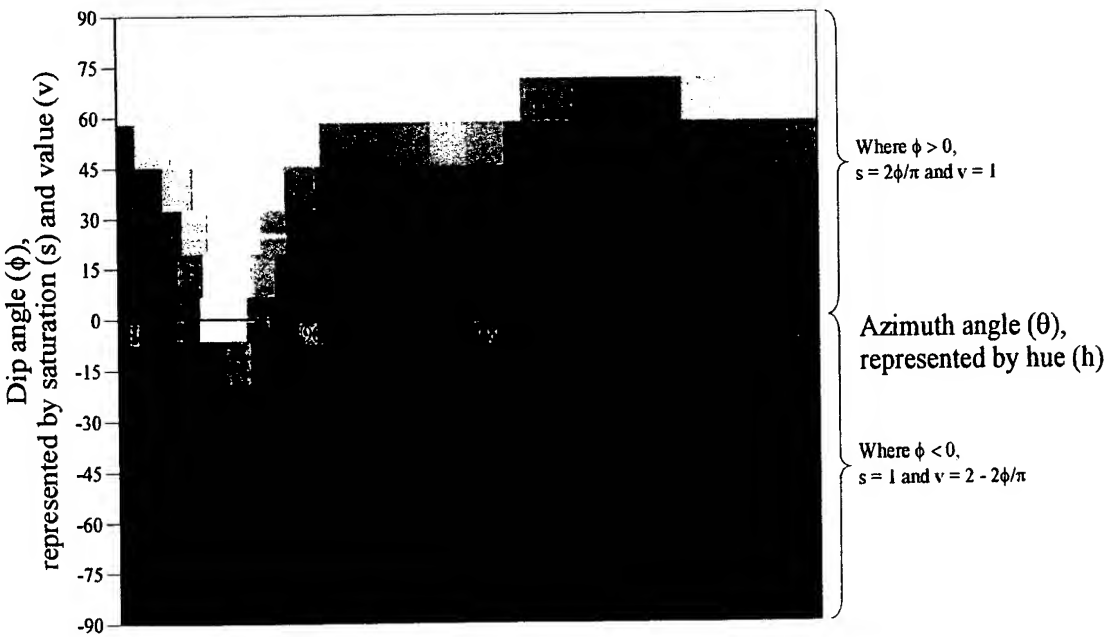

Surface Topography
Borehole 1
Borehole 2
Borehole 3
Area of anomalous vector orientation
Up
N
W
E
S
Down

Fig. 13


90
75
60
45
30
15
0
-15
-30
-45
-60
-75
-90
Dip angle (ϕ),
represented by saturation (s) and value (v)
Where ϕ > 0,
s = 2ϕ/π and v = 1
Azimuth angle (θ),
represented by hue (h)
Where ϕ < 0,
s = 1 and v = 2 - 2ϕ/π